

REMARKS

This is in response to the Office Action that was mailed on July 23, 2002. Claims 8, 9, 12, and 13 are canceled, without prejudice to their subject matter, in order to expedite the prosecution of this application. Claim 1 is amended to overcome a rejection under the second paragraph of 35 USC 112. Claim 1 is also rewritten as an improvement claim. No new matter is introduced by this Amendment. Claims 1, 6, 10, and 11 are in the case.

Objection to the drawings

The Examiner objected to the drawings as not showing the hole, recess, and bend features that had been recited in claims 1, 8, 9, 12, and 13. Claims 8, 9, 12, and 13 have been canceled, and claim 1 has been amended to eliminate its express recitation of the features in question. It is believed that this action obviates the stated objection to the drawings.

Rejection Under 35 U.S.C. §112

Claims 1, 8, 9, 12, and 13 were rejected under the first paragraph of 35 USC 112. The Examiner indicated that the specification does not clearly identify the location of the hole, recess, and bend features recited in the claims. Claims 8, 9, 12, and 13 have been canceled, and claim 1 has been amended to

eliminate its express recitation of the features in question. It is believed that this action obviates the present ground of rejection.

Rejection Under 35 U.S.C. §103(a) Over Shinbo and Jones

Claims 10-13 were rejected under 35 USC 103(a) as being unpatentable over US 6,185,076 (Shinbo) in view of US 5,943,194 (Jones). Claims 12 and 13 have been canceled. Regarding claims 10 and 11, the Examiner alleges that Shinbo shows a yoke component that "has no burr on any ridge line of a finely machined portion thereof", citing Shinbo Figures 16-18D. Shinbo does not show any ridge line of a finely machined portion. In fact, Figures 16, 17A, and 18A-18D show only burrs on the *external* ridge edges of large blocks. This is confirmed by the underlying disclosure, which teaches as follows:

FIGS. 16 and 17 illustrate rough removal work of the bur [sic] by the metal brush. As seen in FIG. 16, the metal brush is rotating, then the carriage is approached and pressed, and the surface burs [sic] are removed. ... the burs [sic] not removed are left on the edges as shown in FIG 17A

Column 13, lines 28 ff. The Examiner has failed to establish a prima facie case of obviousness with respect to the presently claimed yoke component that "has no burr on any ***ridge line of a finely machined portion*** thereof".

Rejection Under 35 U.S.C. §103(a) Over Shinbo, Jones, and Landin

Claims 1, 6, 8, and 9 were rejected under 35 USC 103(a) as being unpatentable over Shinbo and Jones in view of US 6,191,510 (Landin). Claims 8 and 9 have been canceled. Regarding claims 1 and 6, the Examiner acknowledges that the Shinbo reference fails to "show the yoke component comprising a low carbon steel and wherein there is no burr of 0.1 mm or greater in thickness on any ridgeline of said finely machined portion of said yoke component". Office Action, page 5. The Examiner relies on the Landin as alleging teaching the absences of burrs as small as 0.1 mm. However, Landin is not concerned with voice coil motor yoke components. Instead, Landin refers to cores made from combinations of laminate sections. The reference teaches that a burr should not extend very far past the edge of the laminate section (column 17, lines 63-68). The Landin reference however teaches nothing with respect to burrs on ridge lines of *finely machined portions* of voice coil motor *yoke* components. Accordingly, the rejection based upon Shinbo, Jones, and Landin is not believed to be sustainable with respect to claims 1 and 6 herein. The Examiner has failed to establish a *prima case* of obviousness with respect to the presently claimed "improvement comprising the absence of any burr of 0.1 mm or greater in thickness on any ***ridge line of said finely machined portion*** of said yoke component".

Legal standards for rejection

The rigorous burden placed upon an Examiner for establishing a *prima facie* case of obviousness has recently been reviewed by the United States Court of Appeals for the Federal Circuit in *In re Lee*, 61 USPQ2d 1430, (Fed. Cir. 2002). In *Lee*, the court observes:

When patentability turns on the question of obviousness, the search for and analysis of the prior art includes evidence relevant to the finding of whether there is a teaching, motivation, or suggestion to select and combine the references relied on as evidence of obviousness. See, e.g., *McGinley v. Franklin Sports, Inc.*, 262 F.3d 1339, 1351-52, 60 USPQ2d 1001, 1008 (Fed. Cir. 2001) ("the central question is whether there is reason to combine [the] references," a question of fact drawing on the *Graham* factors).

... *In re Dembiczak*, 175 F.3d 994, 999, 50 USPQ2d 1614, 1617 (Fed. Cir. 1999) ("Our case law makes clear that the best defense against the subtle but powerful attraction of a hindsight-based obviousness analysis is rigorous application of the requirement for a showing of the teaching or motivation to combine prior art references."); *In re Dance*, 160 F.3d 1339, 1343, 48 USPQ2d 1635, 1637 (Fed. Cir. 1998) (there must be some motivation, suggestion, or teaching of the desirability of making the specific combination that was made by the applicant); *In re Fine*, 837 F.2d 1071, 1075, 5 USPQ2d 1596, 1600 (Fed. Cir. 1988) ("teachings of references can be combined only if there is some suggestion or incentive to do so.") (emphasis in original) (quoting *ACS Hosp. Sys., Inc. v. Montefiore Hosp.*, 732 F.2d 1572, 1577, 221 USPQ 929, 933 (Fed. Cir. 1984)).

The need for specificity pervades this authority. See, e.g., *In re Kotzab*, 217 F.3d 1365, 1371, 55 USPQ2d 1313, 1317 (Fed. Cir. 2000) ("particular findings must be made as to the reason the skilled artisan, with no knowledge of the claimed invention, would have selected these components for combination in the manner claimed"); *In re Rouffet*, 149 F.3d 1350, 1359, 47 USPQ2d 1453, 1459 (Fed. Cir. 1998) ("even when the level of skill in the art is high, the Board must identify specifically the principle, known to one of ordinary skill, that suggests the claimed

combination. In other words, the Board must explain the reasons one of ordinary skill in the art would have been motivated to select the references and to combine them to render the claimed invention obvious.”); *In re Fritch*, 972 F.2d 1260, 1265, 23 USPQ2d 1780, 1783 (Fed. Cir. 1992) (the examiner can satisfy the burden of showing obviousness of the combination “only by showing some objective teaching in the prior art or that knowledge generally available to one of ordinary skill in the art would lead that individual to combine the relevant teachings of the references”).

It is respectfully urged that the Examiner has not met that burden with respect to the rejections of record. Accordingly, it is respectfully requested that the rejection of the claims herein over Shinbo and Jones (and Landin) be withdrawn, and that this application be passed to Issue.

Conclusion

Should the Examiner have any questions concerning this application, he is requested to contact Richard Gallagher, Reg. No. 28,781, at (703) 205-8008.

Pursuant to the provisions of 37 C.F.R. §§ 1.17 and 1.136(a), the Applicants hereby petition for an extension of one (1) month to November 21, 2002, in which to file a reply to the Office Action. The required fee of \$110.00 is enclosed herewith.


If necessary, the Commissioner is hereby authorized in this, concurrent, and future replies, to charge payment or credit any overpayment to Deposit

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Account No. 02-2448 for any additional fees required under 37 C.F.R. § 1.16 or under 37 C.F.R. § 1.17; particularly, extension of time fees.

Respectfully submitted,

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Attachment: Version Showing Changes Made

VERSION SHOWING CHANGES MADE

1. (twice amended) ~~In a~~ [A] yoke component comprising a low carbon steel configured as a magnetic circuit of a voice coil motor for a hard disk drive, wherein said yoke component has a finely machined portion ~~comprising a ridge line,~~ [said finely machined portion being a through hole, a threaded hole, a recess, or a bend, and wherein there is no] ~~the improvement comprising the absence of any~~ burr of 0.1 mm or greater in thickness on any ridge line of said finely machined portion of said yoke component.

6. (*unamended*) A voice coil motor for a hard disk drive, comprising: a yoke component, made from a low carbon steel, configured as a magnetic circuit of said voice coil motor, wherein said yoke component has on any ridge line of a finely machined portion thereof no burr of 0.1 mm or greater in thickness.

8. *CANCELED.*

9. *CANCELED.*

10. *(unamended)* A yoke component comprising a low carbon steel configured as a magnetic circuit of a voice coil motor for a hard disk drive, wherein said yoke component has no burr on any ridge line of a finely machined portion thereof.

11. *(unamended)* A voice coil motor for a hard disk drive, comprising: a yoke component, made from a low carbon steel, configured as a magnetic circuit of said voice coil motor, wherein said yoke component has no burr on any ridge line of a finely machined portion thereof.

12. *CANCELED.*

13. *CANCELED.*